COMP 512, Spring 2015
Advanced Compiler Construction

Instructor: Keith D. Cooper, keith@rice.edu
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Office hours will be posted on the class web & Piazza sites

Course Objectives: This course will focus on advanced topics in scalar optimization and code generation for an optimizing compiler. Students should gain a working knowledge of best practice algorithms and techniques.

The laboratory project will reinforce the classroom portion of the course with hands-on, experimental experience.

Required work & Grading policies: The course will have a mid-term exam, a final exam, and one laboratory project. Points will be distributed as follows. The mid-term exam will count as 30% of the final grade. The final exam and the project will each count as 35% of the final grade.

Students are responsible for the contents of both the lectures and the readings. Lecture notes will be posted to the course web site. Attendance should improve your performance on the exams and the project. Attendance is not recorded or factored into grades.

Textbook & Reading Materials: The course will use material from *Engineering a Compiler, 2nd Ed.,* by Cooper and Torczon ; specifically, Chapters 8, 9, & 10, along with some portions of 12 & 13 will be covered. Copies will be available on reserve in Fondren Library.

The course will rely on a large set of papers in the area of code optimization. The papers are available from various digital libraries, If you have difficulty accessing the readings, contact the instructor.

Course Web Site: http://www.cs.rice.edu/~keith/512

Any changes to policies will be posted in the two online sites.

Discussion Site: We will be using Piazza to handle questions about assignments, tests, and general class discussion. You should receive an invitation to join the Piazza site during the first week of classes. If you do not, contact the instructor.

Notice: Any student with a disability requiring accommodations in this class is encouraged to contact the instructor outside of class, and to contact Alan Reynolds, Rice's Coordinator for Disability Support Services.